

As discussed from the bottom of page 2 of the application, an all optical switch addresses the problem of electronic bandwidth, but has difficulty performing the logic needed to route packets or providing the memory required for packet buffering. Also, optical switches typically switch very slowly. In accordance with the present invention, an optical switch operates with a schedule which allows for much slower switching than would be required if the routing were directly determined by the input packets. Reordering units rearrange the order of the data units within data streams to correspond to the schedule of the switch, thus allowing the packets to be appropriately matched to the switch schedule for appropriate routing.

The examiner has correctly acknowledged that Munter does not disclose a switch which operates with a schedule. For that feature, Cotter has been cited with specific reference to column 10, lines 26-39. However, it is respectfully submitted that the decision logic of Cotter does not route according to a schedule but rather routes as directly determined by the input stream.

As noted at column 4, lines 47-54, each decision circuit includes AND gates which AND portions of the address field of the packet with a fixed predetermined discriminatory word. As noted at column 6, lines 32-33, addresses of the nodes are represented by three-bit words H. As shown in each of figures 3 and 6, the decision logic ANDs that address H with a predetermined discriminatory word to determine the state of the 2x2 contention resolution module of Fig. 2 and thus direct the packet to the next node. The column 10 excerpt to which the examiner refers suggests replacement of the decision logic diagram of Fig. 4B with that of Fig. 12. Fig. 12, however, though relying on two AND gates, still determines the output directly from the input stream by ANDing the address H in one of the logic gates. Thus, as in Munter, Cotter fails to disclose "an optical switch that operates with a schedule not directly determined by the input stream." Switching in Cotter et al. is always directly dependent on the address H found in the incoming packet.

With respect to claims 11 and 23, the undersigned can find no suggestion of determining a switch schedule by the average load between inputs and outputs. As already noted, Munter